

HAB Taskforce

Background and Overview



Carrie Holsinger, Division of Environmental Epidemiology

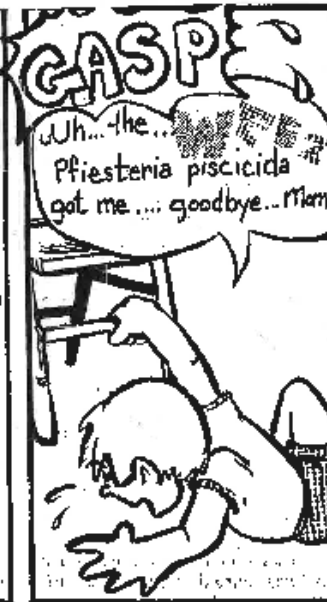
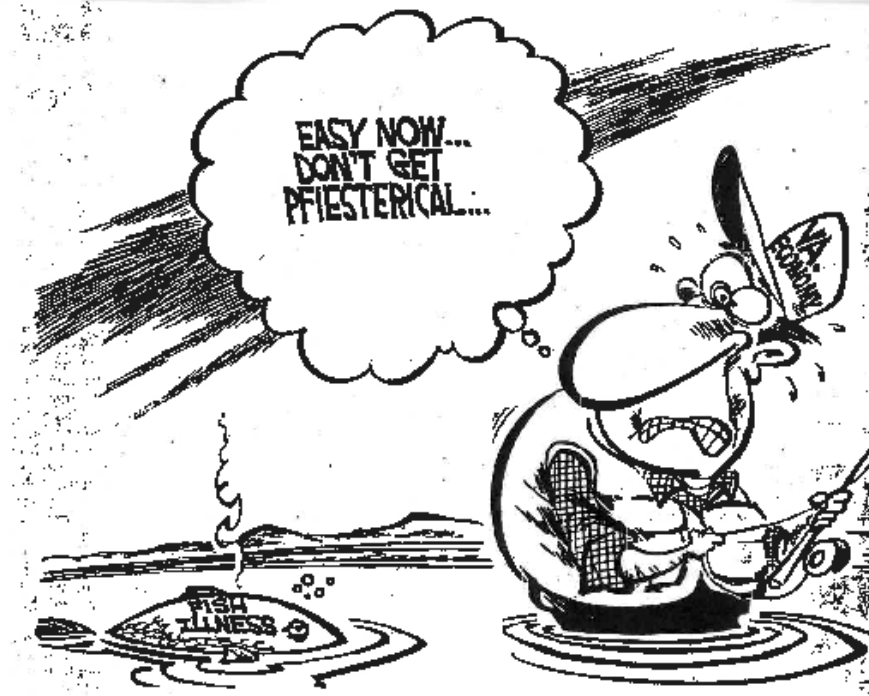
Roger Everton, Department of Environmental Quality

Overview

- HAB Task Force
 - Background
 - Services
- HAB Task Force Response Plan
 - Agency Roles & Responsibilities
 - VDH – Regional/District Roles & Responsibilities

Virginian Pilot

September 1997



HAB Task Force - Background



1990s

2010s-Present

Hysteria over Pfiesteria An Atlantic Coast mystery

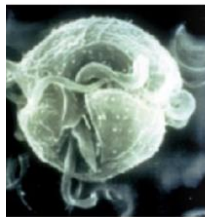
Pfiesteria (fee-STEER-ee-uh) has been causing hysteria along the Atlantic coast. Just the name *pfiesteria* sounds kind of scary, doesn't it? Well, you'll be glad to know that it is not contagious or infectious. You can't catch it like you can a cold. Okay, then, what is it? Pfiesteria is a marine organism that generally falls under the heading "algae." Though it's very small (0.007 of a millimeter wide) and can't be seen

presence of fish, pfiesteria transforms from an inactive cyst to a cyst that produces a poison. Pfiesteria uses this poison to stun fish, making it easier to

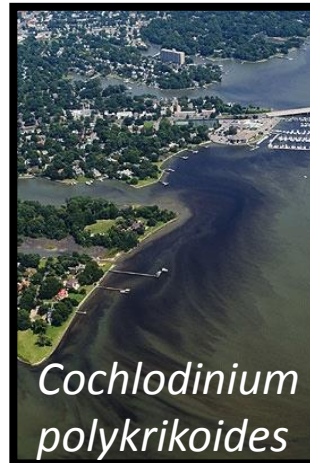
Unfortunately, scientists still do not know a lot about pfiesteria, but research is under way in Maryland, Delaware, and North Carolina, where pfiesteria is most widespread. Many researchers believe that pfiesteria has



transformations. Increases in dead fish also seem to be associated with warmer waters, higher salt contents, and frequent storms.



cyst form of pfiesteria



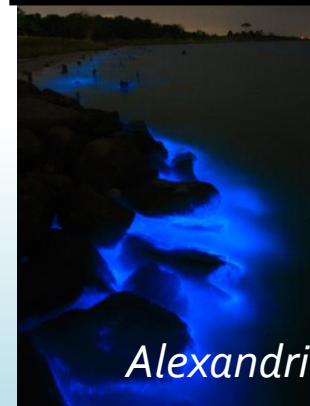
Cochlodinium polykrikoides



Cyanobacteria



Alexandrium monilatum



War waged against pfiesteria

Sick fish close down third river
Coping with pfiesteria threat won't be easy

Doctors affirm link between pfiesteria and human illness

ASSOCIATED PRESS
BALTIMORE — After studying a group of fishermen on the Eastern Shore, a group of physicians yesterday reaffirmed the suspicion that Pfiesteria piscicida may make people sick.

Physicians from the University of Maryland and Johns Hopkins University spent the past three weeks examining people who complained of memory loss and, in some cases, skin lesions after being exposed to contaminated waters.

HAB Task Force

Agency Roles & Responsibilities

Department of Environmental Quality (TF Co-Chair)

- Provide response to marine and freshwater bloom events and fish kills
- Collect samples
- Historically service was limited to coastal areas, but has expanded to service state-wide*

Virginia Marine Resources Commission

- Pfiesteria Task Force Chair
- Provide enforcement for closures of marine waterbodies
- Resource for watermen & boaters

Support Agencies & Institutions

HAB Task Force

Agency Roles & Responsibilities

- **Laboratories: Virginia Institute for Marine Science & Old Dominion University**
- Collect marine water samples
- Provide taxonomic identification and enumeration of cells in fresh/marine samples
- Conduct toxin assays
- Develop assay methods and conduct research
- Phytoplankton and HAB experts
- Fish disease & pathology (VIMS)

HAB Task Force

Agency Roles & Responsibilities

Virginia Department of Health (TF Co-Chair)


- **DSS**: Shellfish growing area surveillance
- **ODW**: Drinking water resource protection, advisories
- **DEE**: Administrative/Programmatic oversight and event response coordination, outreach
- **HDs**: Passive/active surveillance, information exchange with medical community, report/investigate suspected HAB-related illness, issue recreational advisories

HAB Task Force - Services

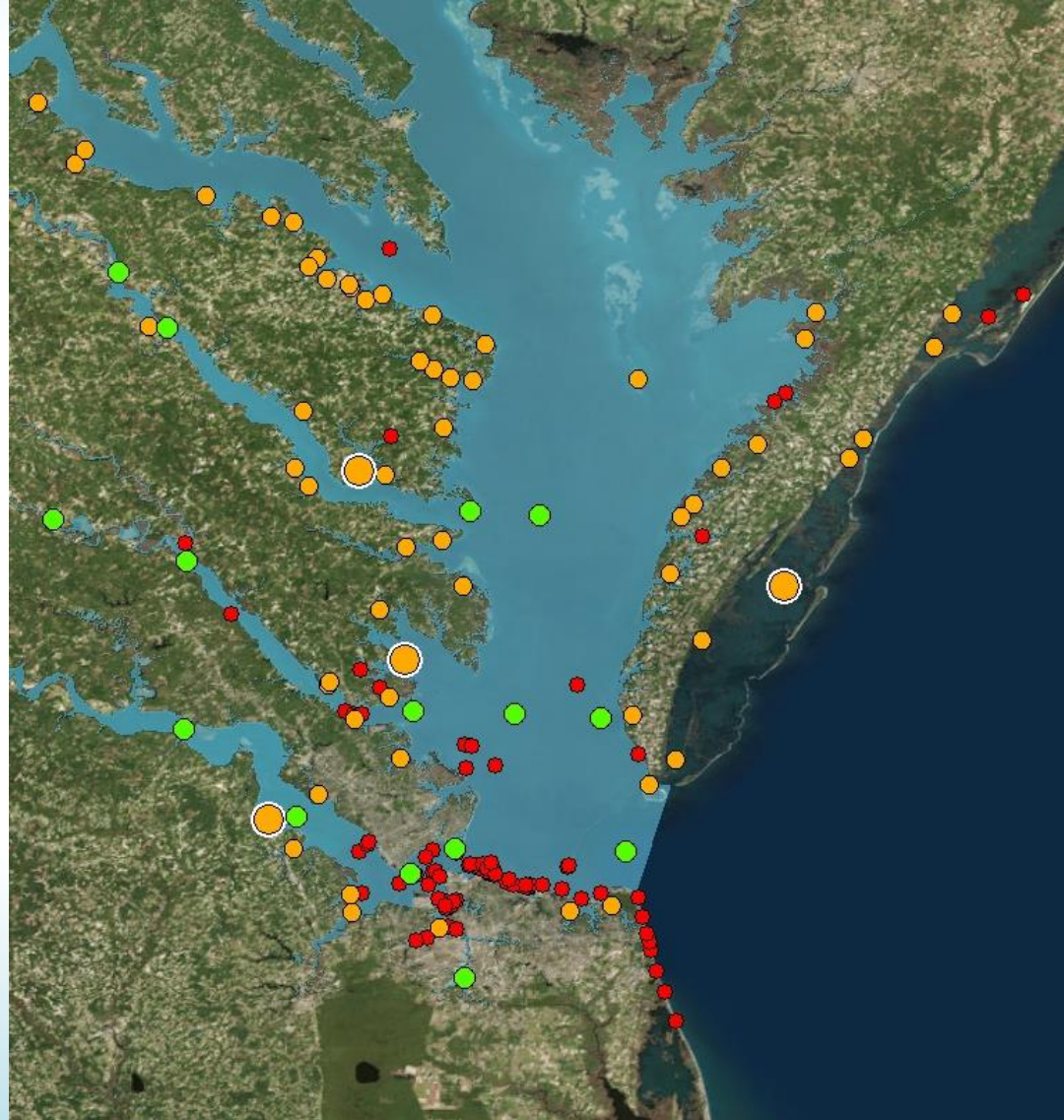
Surveillance, Monitoring & Response

Marine/Brackish Waters

- VDH: DSS- 62 routine stations 


- DEQ/CBP-16 routine 

- DEQ/VDH/ODU
Bloom sampling 



HAB Task Force - Services

Surveillance, Monitoring & Response

VDH:DEE- routine freshwater lake samples: 12 

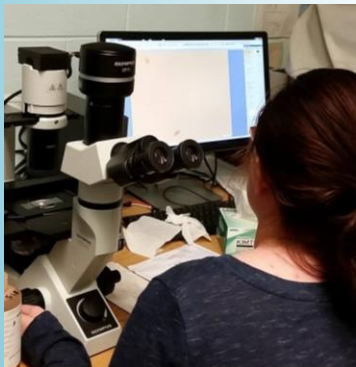
Freshwater bloom samples: 

Freshwater

- Since 2010, sites selected for freshwater surveillance each year
- In 2016, 10/12 lakes with species capable of producing toxin
- 2016 -Six bloom responses

HAB Task Force - Services

Phytoplankton identification, enumeration & toxin assays



HAB Task Force – Services

Reporting Out

- Algal Bloom Map
- Feature pages on website for bloom events
- Seasonal email updates to Task Force members
- Annual HAB Task Force Meeting
- Public Health Messaging



ATTENTION

POTENTIALLY HARMFUL HAVE BEEN DETECTED
Water quality is being monitored to determine if health risks may exist.

- Avoid swimming and wading in areas where surface scum is present.
- Keep away children, pets, and animals, who are more susceptible to illness.
- Thoroughly wash skin with clean fresh water after exposure.

SOME ALGAE MAY CAUSE ILLNESS
Call your doctor or veterinarian if you or your animals experience illness or signs of poisoning.

While fish consumption is not affected by toxic algae, thoroughly cleaning the fish, discarding the carcass & guts, & washing hands & surfaces after contact with soapy water is advised.

Report algal blooms and blooms to: 888-238-6154

For more information: <http://www.vdh.virginia.gov/epidemiology/harmful-algae>

BE AWARE OF ALGAE BLOOMS

During an algae bloom, water may have surface scum, mats, or films with red, green, white streaks or glops.

REPORT BLOOMS TO THE Harmful Algal Bloom Hotline 888-238-6154

It is safe to eat properly cooked fish caught from waters with an algae bloom. Thoroughly clean the fish. Discard the carcass and guts. Wash hands, surfaces, and utensils with soapy water.

The Virginia Harmful Algal Bloom Task Force works to protect public health during algal blooms. Learn more at www.harmfulalgaevirginia.com

Contact Your Local Health Department at: **VDH** VIRGINIA DEPARTMENT OF HEALTH Protecting You and Your Environment

VDH DEPARTMENT OF HEALTH
Protecting You and Your Environment

109 Governor Street, Richmond, Virginia 23219 • www.vdh.virginia.gov

FOR IMMEDIATE RELEASE
20XX

For More Information Contact

Contact name and number (and title if not a PIO--PIO contact preferred)

Month, XX,

Release #XX

TOXIC HARMFUL ALGAL BLOOM OCCURRING IN VA

HAB Task Force – Services

Reporting (In)

- 24/7 HAB Hotline
 - HAB-related human health effects
- Online HAB Report Form
 - Blooms & Fish kills

#866-238-6154

www.HarmfulAlgaeVA.com

HARMFUL ALGAL BLOOM ONLINE REPORT FORM

Select a Report Type *

New Report ▼

Waterbody Name *

Date of Observation *

Time of Observation *

<input type="text"/>	:	<input type="text"/>	AM ▼
HH		MM	

Waterbody Location

City*/County

HAB Task Force - Guidance

HAB Response Plan (Updated 2017)

Objective 1:

Surveillance and Identification of HAB species

Objective 2:

Responding to and Managing HAB events

Objective 3:

*Identify Primary Support Members and their
Roles & Responsibilities*

Objective 4:

Notification During HAB Events

Thank you!



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